

Amendments to the Specification:

Please replace paragraph [0104] with the following rewritten paragraph.

[0104]

- Permanent magnets 20 to 23: Cylindrical NdFB permanent magnets with diameter of 22 mm and thickness of 10 mm (Niroku Seisakusho). The permanent magnets 20 to 23 are incorporated as the cooling unit as shown in ~~Fig. 32— a and Fig. 32— b~~ Fig. 1, Fig. 3(a) and Fig. 3(b). In this state, in more detail, as shown in ~~Figs. 31— a and 31— b~~ Fig 2, the permanent magnets 20 to 23 are embedded into the heat releasing member 30 (length: 50 mm, width: 40 mm, thickness: 25 mm, and the thickness of the copper cover 34: 2.5 mm). The copper tubes 36 and 38 are further routed, the coolant is circulated through the tubes 36 and 38, and the temperature is controlled so as to maintain the temperature of the permanent magnets 20 to 23 below 100°C during the discharge. As a result, the temperature of the permanent magnets 20 to 23 does not exceed Curie point during the discharge. The minimum distance between the opposing permanent magnets is 82 mm. The magnetic flux density at the edge of the tip of the electrode 11 is 7 mT.

Please replace the Abstract with the attached amended Abstract.